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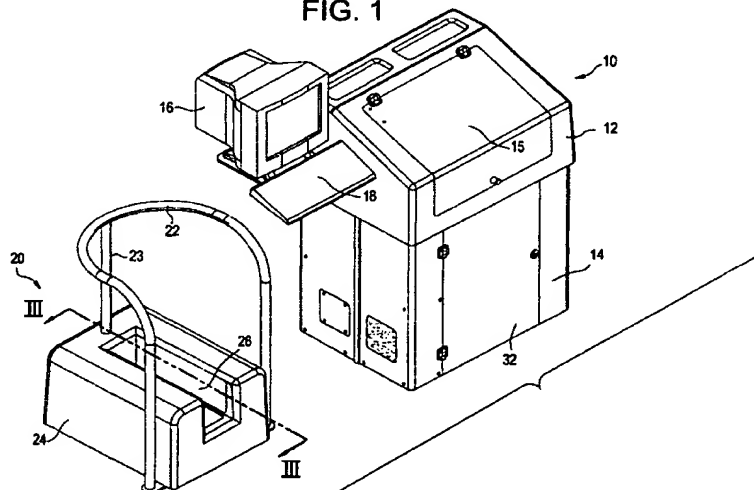
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(54) **Method and system for forming custom shoe insoles**

(57) The present invention includes a method for forming a custom-made insole including the step of positioning a foot to be measured on a scanning station (20). The scanning station includes at least one laser unit which is passed along an undersurface of the foot. The undersurface of the foot is scanned by the at least one laser scanning unit which measures the detected

surface coordinates of the undersurface. The measured surface coordinates are processed and transmitted to a computer. A milling station (10), in communication with the scanning station and computer, includes a milling assembly for forming the custom-made insole. The computer controls the operation of the milling assembly based upon the coordinates determined by the at least one laser scanning unit.

FIG. 1



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EUROPEAN SEARCH REPORT

Application Number
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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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Y	* column 7, line 22 - column 8, line 58 * * figure 1 *	6-12, 15-19, 22-30	
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Y	US 5 640 779 A (ROLLOFF PAUL D ET AL) 24 June 1997 (1997-06-24) * column 21, line 17 - column 22, line 48; figures 10-12 * * column 24, line 64 - column 25, line 10; figures 11,12 *	7-12, 22-30	
Y	VORUM RESEARCH COMPANY: "Canfit-plus yeti 3d foot scanner" INTERNET PUBLICATION, 'Online! 6 April 1998 (1998-04-06), XP002140568 canfit@vorum.com Retrieved from the Internet: <URL:www.vorum.com/yeti.htm> 'retrieved on 2000-06-20! * the whole document * 6/4/1998 is the date the site has been modified last	17-19	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A43D B23Q
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 June 2002	Examiner Schölvinck, T.S.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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EUROPEAN SEARCH REPORT

Application Number
EP 00 10 5555

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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
Place of search		Date of completion of the search	Examiner
THE HAGUE		21 June 2002	Schölvinck, T.S.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 00 10 5555

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-6, 13-21

Method and apparatus for manufacturing a custom-made insole comprising a plurality of scanning units in a scanning station, a data processing unit for the scanned surface coordinates and milling

2. Claims: 7-12, 22-30

A milling station comprising a milling tool with three axes of movement, driven by stepper motors and vacuum means for cleaning

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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21-06-2002

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